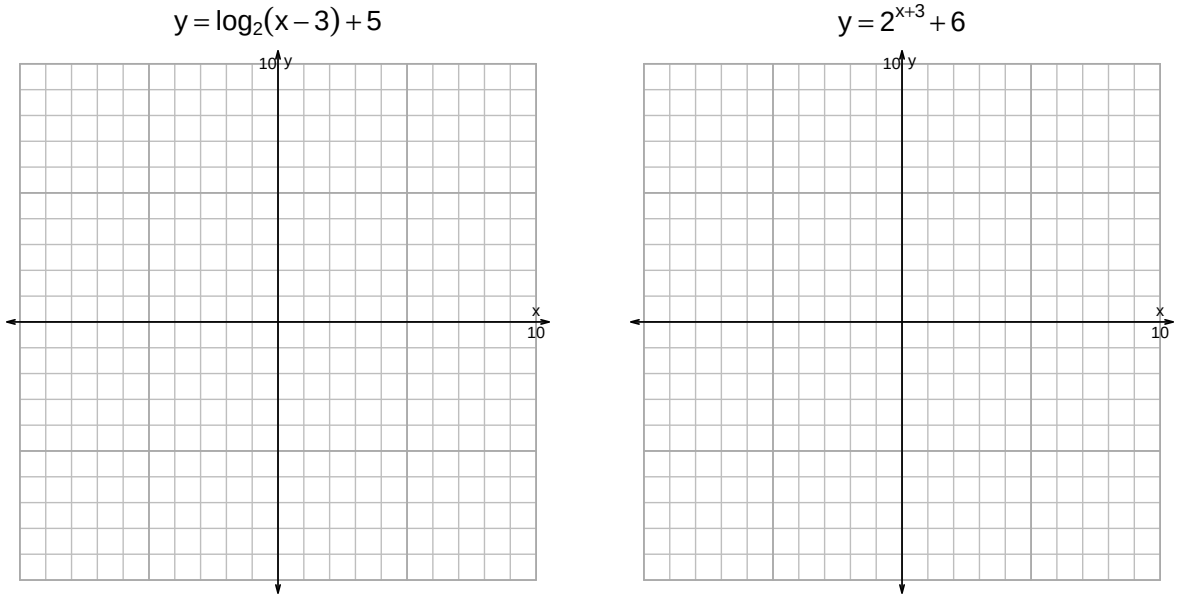
Name: Date:

s18quiz: EXP LOG (Practice v142)

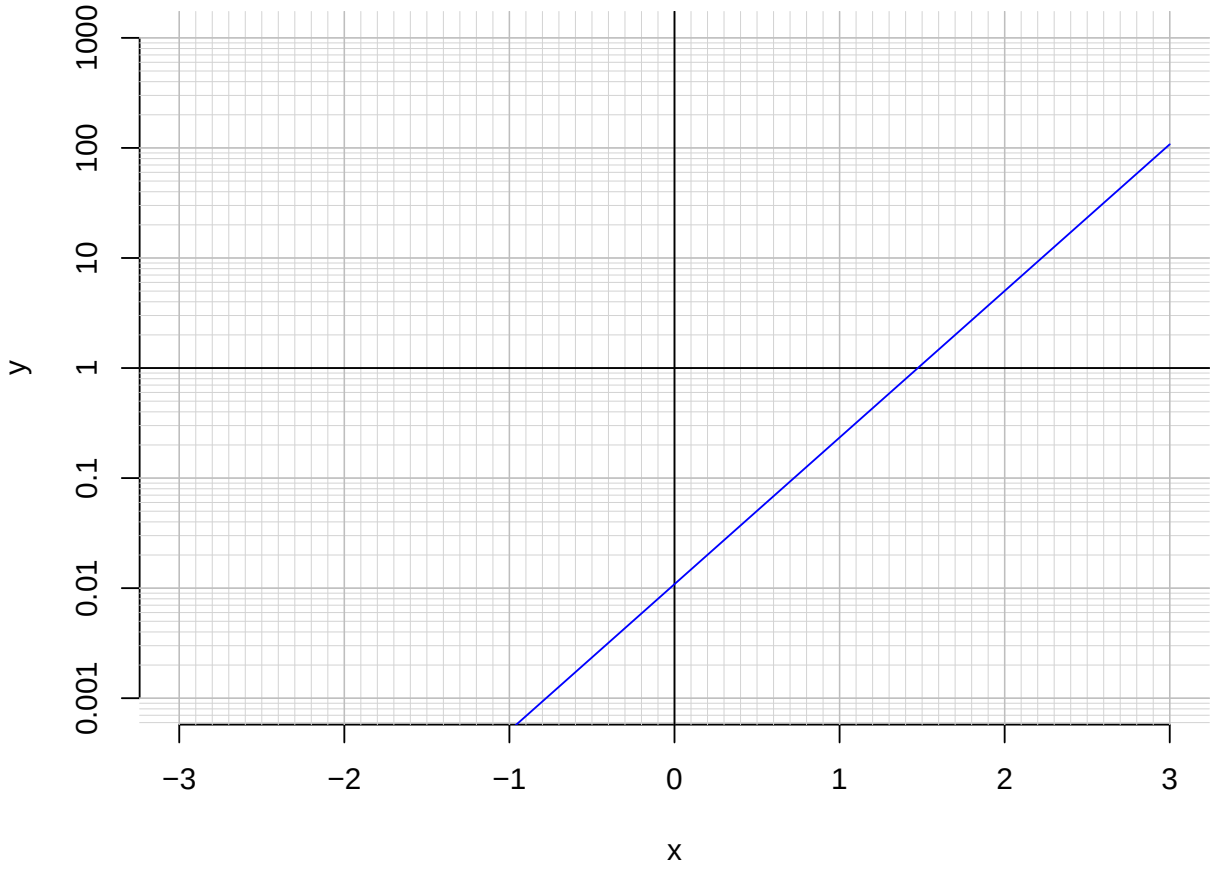
1. Graph $y = \log_2(x-3)+5$ and $y = 2^{x+3}+6$ on the grids below. Also, draw any asymptotes with dotted lines.



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$23 = \left(\frac{3}{7}\right) \cdot 2^{-4t/5}$$

3. An exponential function $f(x) = 0.0109 \cdot e^{3.07x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate $f(1.7)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(0.008)$.